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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/740,375 | 12/19/2000 | Samuel N. Zellner | 00382 | 4937 |
| 7590 | 03/01/2004 | | EXAMINER | |
| Jonathan C. Parks, Esq. Kirkpatrick & Lockhart LLP Henry W. Oliver Bldg. 535 Smithfield Street Pittsburgh, PA 15222-2312 | | | GRAVINI, STEPHEN MICHAEL | |
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| | | | 3622 | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|-------------------------------|------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 09/740,375 | ZELLNER ET AL. |
| | Examiner Stephen M Gravini | Art Unit 3622 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
 THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 15 July 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|---|---|
| <ol style="list-style-type: none"> 1)<input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2)<input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3)<input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>5&6/5-2001&7-2003</u>. | <ol style="list-style-type: none"> 4)<input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ 5)<input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6)<input type="checkbox"/> Other: _____ |
|---|---|

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable

subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete, and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998). Together, the "technological arts" and "useful, concrete, and tangible result" judicial review standard, result in a comprehensive examination standard wherein the "technological arts" is one element and the "useful, concrete, and tangible result" is another complementary element.

This comprehensive examination standard was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an

improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See *State Street Bank & Trust Co.* at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, *State Street* abolished the Freeman-Walter-Abele test used in *Toma*. However, *State Street* never addressed the second part of the analysis, i.e., the "technological arts" test established in *Toma* because the invention in

State Street (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the *Toma* test. The Board of Patent Appeals and Interferences (BPAI) have recently acknowledged this dichotomy in affirming a §101 rejection finding the claimed invention to be non-statutory. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BPAI 2001).

Claims 13-20 are rejected under 35 U.S.C. 101 because the independently claimed invention does not recite a useful, concrete, and tangible result under *In re Alappat*, 31 USPQ2d 1545 (Fed. Cir. 1994) and *State Street Bank & Trust Co. v. Signature Financial Group Inc.*, 47 USPQ2d 1596 (Fed Cir. 1998) such that the claimed invention is within the technological arts under *In re Waldbaum* 173 USPQ 430 (CCPA 1972) wherein the phrase “technological arts” is synonymous with “useful arts” as it appears in Article I, Section 8 of the United States Constitution. In this claim, it is considered that a concrete and tangible result is not recited. Specifically, the recitation of receiving information about the identity and location of a user, searching and selecting location specific advertisements based on user criteria, and sending the advertisements without identity transmission is considered not to produce a concrete result because a result cannot be assured or is not reproducible. The receiving information about the identity and location of a user, searching and selecting location specific advertisements based on user criteria, and sending the advertisements without identity transmission recitations are considered an abstract concept that is non-enabling because a result cannot be assured such that one skilled in the art would be able to achieve a reproducible result. Furthermore, under *In re Wamerdam*, 33 F.3d 1354; 31 USPQ2d 1754 (Fed. Cir. 1994), the receiving information about the identity and location

of a user, searching and selecting location specific advertisements based on user criteria, and sending the advertisements without identity transmission recitations are considered intangible because those steps are simply an abstract construct, such as a disembodied data structure and a method of making it, wherein those recitations involve more than a manipulation of an abstract idea and therefore is non-statutory under 35 USC 101. Because the independently claimed invention does not recite a useful, concrete, and tangible result, such that it is considered not within technological arts so that it uses technology in a non-trivial matter. Finally under *Ex parte Bowman*, 61 USPQ2d 1665 (Bd. Pat. App. & Inter. 2001) (unpublished but cited for analysis rather than precedent), in which an invention disclosed and claimed directed to a human merely making mental computations and manually plotting results on a paper chart is nothing more than an abstract idea which is not tied to any technological art and is not a useful art as contemplated by the United States Constitution. In this independently claimed invention, the steps of receiving information about the identity and location of a user, searching and selecting location specific advertisements based on user criteria, and sending the advertisements without identity transmission are considered nothing more than an abstract idea since it is not tied to any technological art. However in order to consider those claims in light of the prior art, examiner will assume that those claims recite statutorily permitted subject matter.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Kulakowski et al. (EP 0 964 542).

Claims 13-20 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Want et al. (US 6,122,520) or Obradovich et al. (US 6,133,853).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over examiner's personal experience with sending an advertisement over a communication network to a user operating a wireless communication device as provided by highway billboard advertising. The claimed database, TCP/IP, and internet are considered automated features of an old and well known manual operation, which will also be discussed infra. The claimed invention under examiner experience is based on the broadest reading of the claims under the *Graham* decision. Since at least 1990, examiner has experienced billboard advertising, which has performed the claimed method comprising:

- receiving first information about a location of a user;
- receiving second information about the identity of a user;
- searching a first information base containing a plurality of location-specific advertisements;
- selecting a first one of the plurality of location-specific advertisements that is associated with the location of the user or selecting one of the plurality of location specific advertisements based on one or more criteria pre-selected by the user; and
- sending the first one of the plurality of location-specific advertisements to a wireless communication device in the form of a first message over a communication network with or without transmitting the identity of the user therewith are part of examiner's personal experience. Examiner's personal experience also includes the claimed user-specific advertisements and information in the form of a second message, pre-selected user criteria including preferences, fee obtained identity, service sign up, message

transmission extraction, location matching, information provider, and emergency service provider. As a premise, a communication device through a wireless communication device is considered functionally equivalent to an exit sign or milepost marker indicating the location of a highway billboard advertised item because both are used for communications over a highway network in a wireless communication device. Also the communication system are considered functionally equivalent to a highway billboard advertisement, such as alerting drivers to the next rest, food, or fuel stop. The claimed feature of receiving first information about a location or an identity of a user is considered functionally equivalent to examiner observing a proliferation of highway billboard advertisements inviting drivers to dine, rest, or obtain fuel to trigger a hungry, weary, or fuel deprived driver appealing to information that a driver is on the highway (location) and hungry, weary, or fuel deprived (identity). The claimed step of searching a first information base containing a plurality of location-specific advertisements and selecting a first one of the plurality of location-specific advertisements that is associated with the location of the user or selecting one of the plurality of location specific advertisements based on one or more criteria pre-selected by the user is considered functionally equivalent the examiner accepting the billboard advertisement invitation to dine, rest, or obtain fuel at a retailer connected with the billboard distributed communication system. The claimed step of sending the first one of the plurality of location-specific advertisements to a wireless communication device in the form of a first message over a communication network with or without transmitting the identity of the user therewith is considered equivalent to various visual cues, such as trade names,

pricing, retailer locations from the billboard advertisement, such that examiner-type drivers would be alerted to the visual billboard broadcast. The claimed user-specific advertisements and information in the form of a second message, pre-selected user criteria including preferences, fee obtained identity, service sign up, message transmission extraction, location matching, information provider, and emergency service provider included in examiner's experience. The claimed invention contains automated features, such as database, TCP/IP, and internet which are obvious automated variations to the examiner's experience such that the examiner will use Official notice to obviate that claimed subject matter. The database, TCP/IP, and internet, as claimed, are interpreted to encompass automated electronic communications associated with electronic mail, Internet, and/or computer to server communications that have been performed by highway billboard advertisers using manual or semi-automated means incorporating manual means of the presently claimed automated invention. The claimed invention, recited by the applicant, is considered to have been provided to examiner by personal experience long before the filing of applicants' invention. Those terms are merely modern terms for the method used to carry out the functionality of the claimed invention. More specifically the claimed database, TCP/IP, and internet are considered modern day terms in describing visual and interpretive communications used over highway billboard advertising to benefit both users and advertisers. Examiner notes that it is old and well known to those skilled in the art of the claimed method, that it would have been obvious to claim the invention as recited by the applicants, in order to overcome the explicit teachings of examiner's personal

experience discussed *supra*. It would have been obvious to one skilled in the art to provide the automated claimed method since those features, particularly database, TCP/IP, and internet are merely automated features of a concept that is old and well known. Please see *In re Venner*, 262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958) in which the court held that broadly providing an automatic or mechanical means to replace a manual activity which accomplished the same result is not sufficient to distinguish over the prior art. The motivation to combine applicants' claimed invention with highway billboard advertising under examiner experience is to allow greater consumer targeting capabilities through electronic mediums, while transferring information, which clearly shows the obviousness of the claimed invention. One would also be motivated to combine the teachings of examiner's experience with current computer and network innovations available such that much of highway billboard advertiser duties can be carried out in a more efficient manner through computer technology than manually searching for billboard advertised retailers. One would be further motivated to combine the purchases claimed with the billboard advertised retailers such that one could more efficiently rest, dine, or obtain fuel for examiner-like consumers traveling on a highway.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11

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F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 09/740,373. Although the conflicting claims are not identical, they are not patentably distinct from each other because the presently claimed location specific advertisements are an obvious variation of the co-pending application claimed user specific advertisements.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Reference U cited in this action represents the most relevant non-patent literature reference while Tso et al. (US 6,047,427) teaches location specific advertising.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Steve Gravini whose voice telephone number is (703) 308-7570 and electronic transmission / e-mail address is "steve.gravini@uspto.gov". Examiner can normally be contacted Monday through Friday from 6:00 a.m. to 3:30 p.m. **If applicants choose to send information by e-mail, please be aware that confidentiality of the electronically transmitted message cannot be assured.** Please see MPEP 502.02. Information may be sent to the Office by facsimile transmission. The facsimile transmission telephone numbers for TC-3600 are:

| | |
|--------------------|----------------|
| After-final | (703) 872-9327 |
| Official | (703) 872-9306 |
| Non-Official/Draft | (703) 872-9325 |

Steve Gravini
STEPHEN GRAVINI
PRIMARY EXAMINER

smg
February 24, 2004